



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,189	01/14/2005	Shigetoshi Nishijima	018765-201	2856
21839	7590	08/08/2006	EXAMINER	
BUCHANAN, INGERSOLL & ROONEY PC			KRUEER, KEVIN R	
POST OFFICE BOX 1404			ART UNIT	
ALEXANDRIA, VA 22313-1404			PAPER NUMBER	

1773

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/521,189

Applicant(s)

NISHIJIMA ET AL

Examiner

Kevin R. Kruer

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 05 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,10,11 and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,10,11 and 13-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The rejection of claim 5 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention has been overcome by amendment.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1- 4, 6, 7, 11, and 13-15 are rejected under 25 U.S.C. 102(b) as being anticipated by EP 1264685A (herein referred to as Nakahara).

Nakahara teaches a multi-layered film that has been oriented mono-axially at least twice. The film comprises a 4-methyl-1-pentene layer on either side of a polypropylene or polyethylene layer. The 4-methyl-1-pentene is co-polymerized with a 2-20C alpha-olefin (abstract). Said laminate has satisfactory stretchability in production, high rigidity, and satisfactory releasability from copper foil (abstract). The copolymer comprises not more than 7wt% alpha olefin (0029). Nakahara further teaches single layer uni-axially oriented film have been used in the art (007).

Said 4-methyl-1-pentene layer is herein understood to “not substantially comprise wax or organic silicone compound” because the reference is silent to the necessary presence of either component.

The film is herein understood to have a peel area of 50% or more when the film, together, with a copper foil surface subjected to roughening treatment is subjected to heating and pressing treatment because said laminate is taught to exhibit satisfactory releasability from copper foils.

The degree of orientation of the laminate taught in Nakahara is herein understood to be taught with sufficient specificity to anticipate the "4.3times or more" limitation of claim 5. Furthermore, said degree of orientation is understood to be taught with sufficient specificity to anticipate a "thermal coefficient of contraction of 20% or more along the direction in which the film is drawn" because said film is oriented to the same extent as the claimed film. It is known in the art that degree of orientation and thermal coefficient of contraction are directly related to one another. Furthermore, the courts have held that the recognition of a latent property does not patentably distinguish a claimed product from a product anticipated by the prior art.

With regard to claim 13, the film taught in Nakahara is understood to read on the claimed drawn film exhibiting the property that when its laminated to thermoplastic film layer (b) said films can be peeled from each other at a peel strength of 500g/15mm or less because said release film (A) is compositionally identical to the claimed film. Thus, said property is understood to be latent to said film.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1773

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kocher et al (US 5,919,547) in view of EP 1264685A (herein referred to as Nakahara).

Kocher teaches a multilayer film wherein polyethylene layer is extruded next to a methyl-pentene layer (col 15, lines 35+) such that said layers peel apart from one another. Said film may be biaxially oriented.

Kocher does not teach that the methyl-pentene polymer should be a copolymer. However, Nakahara teaches polymerizing 7-3wt% C2-C20 olefinic monomers with the methyl-pentene improve its moldability and mechanical strength properties (0029-0030). Thus, it would have been obvious to utilize the claimed copolymer in the laminate taught in Kocher. The motivation for doing so would have been to improve the polymethyl-pentene polymer's mechanical properties and moldability.

Kocher further teaches the laminate may be biaxially oriented but does not teach the degree to which it should be oriented. However, it is known in the art that a film's barrier properties improve with orientation. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made optimize the orientation of the film taught in Kocher in order to optimize the film's barrier properties.

Response to Arguments

Applicant's arguments filed May 5, 2006 have been fully considered but they are not persuasive.

Applicant argues Nakahara does not teach the process for producing the drawn film of the claimed invention. The examiner notes it is not clear what method limitations in the products claims are not considered by applicant to be taught in Nakahara. The examiner further notes that the courts have held the method of making a product does not patentably distinguish a claimed product from the prior art unless it can be shown that the method of making the product inherently results in a materially different product. In the present application, no such showing is found. Applicant argues the examples in the specification demonstrate the present invention have significantly different properties from the drawn films produced by Nakahara. Specifically, Applicant argues Example 1 of the specification demonstrates (in comparison to comparative example 3) that a film made by drawing a sheet of layer (B)/layer(A)/layer(B) and then peeling layers (B) from the layer (A) gives a film with improved peeling area and a thermal coefficient of contraction. The examiner initially notes the thermal coefficient of contraction does not significantly differ from the comparative example and that said physical property is not currently recited in the claims. The examiner further notes the claims do not agree in scope with the method utilized to make the single layer film of claim 1 and that the claims are not limited to a single layer film. Furthermore, comparative example 3 is not representative of the closest prior art. Since applicant's showing is insufficient and does not agree in scope the claimed invention, applicant's arguments are not persuasive.

Applicant further argues the peel strength of claim 13 is not explicitly disclosed by the references. Said argument is noted and the examiner acknowledges Nakamura

Art Unit: 1773

does not contain an explicit teaching with regards to peel strength. However, applicant has failed to explain how the examiner erred in making a determination that said claimed peel strength is inherent to the sheet taught in Nakamura. Therefore, the examiner maintains the position that the claimed peel strength is inherent to the sheet taught in Nakamura.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'K-R-K' with a stylized flourish at the end.

Kevin R. Kruer
Patent Examiner-Art Unit 1773